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10/716,402	11/20/2003	Luigi Satragno	1008788-000053	5541

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EXAMINER

LAMPRECHT, JOEL

ART UNIT	PAPER NUMBER
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3737

NOTIFICATION DATE	DELIVERY MODE
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01/26/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/716,402	Applicant(s) SATRAGNO ET AL.	
	Examiner JOEL M. LAMPRECHT	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4,6-28,30 and 32-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4,6-28,30 and 32-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 1-4, and 6-27 objected to because of the following informalities:

Regarding claim 1, improper means plus function language is used in line 18 (sliding means), in line 18, "support plate" should be "supporting plate", in line 16, "the floor" lacks antecedent basis, and in line 13, "apparatus" should be inserted after imaging. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6-19, 21-24, 27, and 34-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrozzi et al (EP 1 004 269 A1) in view of DeMeester et al (US 6,029,281). The disclosure of Carrozzi et al, specifically in regards to the figures, discloses a majority of the same invention as in Applicants' application.

Regarding Claim 1, Carrozzi et al disclose in Figure 1, Element 1 an MRI apparatus, Element 201 a cavity, wherein the table can be attached to an MRI base block supporting structure (0019-0026), is slide-able in at least 1 direction (0043), and has means for removable connection between the table and MRI apparatus (0041-0043).

Regarding Claims 6-19, and 21-24, Carrozzi et al disclose a base block with wheels (Fig 2-3), a platforms with base plate and upper MRI supporting plate (Fig 1-4), a table guide interposed between the base plate and the upper plate of the platform (Figure 2-3), elements for rolling (element 4), and also a supporting plate which is slidable along a base plate, having an extension shaped as a circle coaxial to the sector shaped sliding guide (Fig 2-4). Additionally, Carrozzi et al disclose a support extension (support of element 1 from the figures), a magnet structure (element 1) having space (between 1 and 201) for accommodating a body part, and coaxial sector-shaped guides, with perpendicular axes intersecting the magnet structure. Carrozzi et al. also disclose a support structure that has the capacity to extend through an angle of less than 360 degrees or less than 180 degrees, sides of a magnet structure having an outer edge, arched to the table sliding guide. Within the interpretation of the Claims as written Carrozzi et al also disclose sector-shaped guide and/or the upper support plate of the

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MRI apparatus and/or the upper support plate of the extension either individually or as a coupling within the disclosed system, can rotate a full 360 degrees, as when the system is not coupled, the rollers on the invention and pressure make it easily possible to rotate the guide, or supports a full 360 degrees.

Regarding Claim 27, Carrozzi et al disclose a table coupled to the MRI apparatus at one end side and extending radially with respect to the sector-shaped sliding guide (Figures 1-4).

Regarding Claims 34-37, Carrozzi et al disclose a system with an MRI apparatus, a table coupled to the apparatus, a guide for relative slide-able displacement of the table and the apparatus, which has the shape of a circle, and at least one platform rotates with an axis of rotation coaxial to the axis of the sector-shaped guide for the table which has means for rolling (Figure 1-6).

Carrozzi et al do not disclose the use of a base block of the MR imaging apparatus which has wheels or rollers for rotating the MRI apparatus relative to the table. Attention is then directed to the secondary reference by DeMeester et al which discloses the use of a magnetic structure complete with rollers and rotatable magnets for the purpose of affording a greater access to the patient during a procedure (Figures 1-3 and Col 5 Line 53- Col 6 Line 20). The rotatable system of DeMeester et al, coupled with the apparatus of Carrozzi et al so that the rotatable magnet system of DeMeester et al replaces the magnet system of Carrozzi et al provides for a rotatable support plate and magnet with respect to the same axis of rotation being used for the rotary guide of Carrozzi et al (Fig 4a of DeMeester et al and Figure 4 of Carrozzi). It

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would have been obvious to one of ordinary skill in the art at the time of the invention to have included the roller system of DeMeester et al with the patient table MRI device of Carrozzi et al to allow for easier patient access and more customizable device positioning (Col 1 Line 55- Col 2 Line 17).

Claims 2-4, 20, 25-26, 28, 30, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carrozzi et al (EP 1 004 269 A1) in view of DeMeester et al as applied to claims 1,16 above and in further view of Tazaki (JP 11028199 A). Regarding Claims 2-4 Carrozzi et al in view of DeMeester et al disclose all the limitations of the claims as listed but does not disclose using two tables simultaneously, rather Carrozzi et al in view of DeMeester disclose having one table. One having sufficient skill in the art would have expected the invention to perform equally well dependent on patient based on multiple factors, as the tables are used as a support structure for the patient, and if the patient was too tall for just one table, another could be added. It is further noted that JP 11028199A discloses the use of multiple rotatable and variably positionable tables for the purpose of facilitating easier imaging acquisition (English language abstract provided complete with motivations).

Regarding Claims 20, and 25-26 Carrozzi et al disclose a table guide for slidable displacement of the table fitted onto an intermediate part, removably coupled to the MRI apparatus by sliding guides (see Figure 4, 5, 6, 7, and specifically 13-14) and a cavity for accommodating the magnet structure, but does not disclose two or more tables being simultaneously coupled to the magnetic resonance imaging apparatus, rather

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Carrozzi et al discloses one table being removably coupled at a plurality of locales around the MRI apparatus. One having sufficient skill in the art would have expected the invention to perform equally well based on the design choice, as the tables are used in the exact same manner and are iteratively added if more support is needed for positioning. Additionally, attention is directed to the secondary teaching reference by Tazaki, which specifically discloses the use of multiple rotatable and positionable tables for the use of facilitating easier acquisition of MR images of a person.

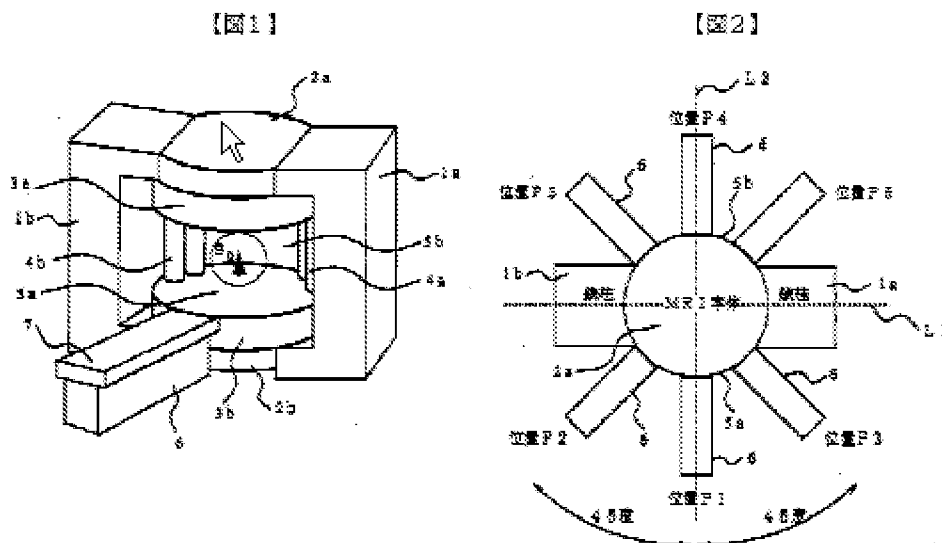
Regarding claims 28, 30, 32, and 33 Carrozzi et al disclose all the limitations of the claims except for providing two patient tables, each at an opposing side of a guide and providing an MR apparatus which is capable of rotation coaxially to the guide sections. In Claims 28-33, Carrozzi et al discloses one guide section, but does not disclose two separate guide sections that extend through an angle of less than 180 degrees or less than 90 degrees and are coaxial to each other. Carrozzi discloses a guide section, which contains two diametrically opposite sections each fully capable of placement of diametrically opposite tables by coupling them to the central portion (element 102). Using Figure 6 as a guide, Carrozzi is capable of having tables placed on the opposite sides of the central portion if the patient being imaged required extra support, considering there are already locking pins (element 6) on both sides of the central portion (102). The secondary reference by Tazaki (JP 11028199A), discloses the use of multiple tables (paragraphs 0001-0002) and the placement of a table in diametrically opposite directions for the purpose of allowing for displacement around an MR apparatus. Finally, attention is directed to the secondary reference by DeMeester

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et al which discloses the use of magnet structure which is capable of being rotated to allow for rotation with respect to the imaging table the patient is rested upon (Figure 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have allowed for rotation of the MR apparatus or magnet with respect to the table in order to provide increased access to a patient undergoing an MRI procedure (Col 1 Line 55- Col 2 Line 45).

Two images from the JP patent have been included for additional clarification on the motivation to use multiple tables during an MRI procedure below as the use of multiple tables is disclosed within the background and the patent to Tazaki discloses that the knowledge of multiple tables at diametrically opposing positions is well-known within the art as cited in the description.



Response to Arguments

Applicant's arguments filed 9/11/08 have been fully considered but they are not persuasive. Regarding the argument that the rejection of claim 1 is improper based on the fact that the MR apparatus and upper support plate are not slidable with respect to the base plate, Examiner respectfully disagrees. The DeMeester reference, which is being relied upon for the rotatable magnet structure clearly uses a rotational MR drive which sits on an axis (the same axis of motion of the table). This rotatable magnet, when coupled with the rotatable table system of Carrozzi yields an MR apparatus with rotatable base block (See element 301 on Figure 4 of Carrozzi and the slidable magnet system of the DeMeester reference) relative to the rotatable platform. As further noted within Applicant's specification, the terms slidable and rotatable are characteristically analogous in respect to the fact that when something slides relative to another portion in either a translation or a rotation. Thus even the rotational motion of the magnet base block would constitute a "slidable" upper support in the combination of references.

With regard to the argument that the combination does not disclose a platform that rotates with an axis coaxial to that of the guide for the table, again Examiner points out that the rotatable magnet apparatus being used in combination with the Carrozzi reference includes such a rotatable platform and the table of the Carrozzi reference includes a table which is disposed on the floor and slidable on wheels or rollers.

With regard to the argument that Tazaki does not disclose the use of more than one table, Examiner has clarified the rejection to include the discussion about multiple tables. While the invention of Tazaki aims to free up the most space in the operating

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region, they acknowledge as well-known the use of multiple tables disposed at various locations around one MR apparatus. This disclosure and the subsequent discussion about the functional equivalence of the system of Tazaki to using multiple tables allows for the distinction that multiple tables are fully capable of being used with the Tazaki reference as the teaching and reasoning (patient throughput) are both disclosed within the discussion of the invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **JOEL M. LAMPRECHT** whose telephone number is (571)272-3250. The examiner can normally be reached on 8:30-5:00 Monday - Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571) 272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/
Primary Examiner, Art Unit 3737

JML